

Attachment 6

Original Proposal

Rule R307-424

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 01/02/2007

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 12/12/2007 at 1:30 PM, DEQ Building, 168 N 1950 W, Room 201, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 02/07/2007

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-224. Mercury Emission Standards: Coal-Fired Electric Generating Units.

R307-224-1. Purpose and Applicability.

(1) Nationwide reductions of mercury (Hg) emissions from certain coal-fired electric generating units are required by 40 CFR Part 60, subparts B and HHHH in effect on June 9, 2006, and by the Designated Facilities Plan for coal-fired electric generating units, incorporated by reference at R307-220-5.

(2) R307-224 regulates mercury emissions from any coal-fired electric generating unit as defined in 40 CFR 60.24.

R307-224-2. Emission Guidelines and Compliance Times for Coal-Fired Electric Generating Units.

(1) The following sections of 40 CFR Part 60, subpart HHHH effective on June 9, 2006, are adopted and incorporated by reference into these rules:

- (a) Sections 60.4101 through 60.4124;
- (b) Sections 60.4142 paragraph (c)(2) through paragraph (c)(4);
- (c) Sections 60.4150 through 60.4176.

KEY: air pollution, electric generating unit, mercury

Date of Enactment or Last Substantive Amendment: 2007

Authorizing, Implemented, or Interpreted Law: 19-2-104(3)(a); 40 CFR Part 60, Subparts Da and HHHH

Environmental Quality, Air Quality

R307-424

Permits: Mercury Requirements for Electric Generating Units

NOTICE OF PROPOSED RULE

(New Rule)

DAR File No.: 29231

FILED: 11/15/2006, 11:12

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of Rule R307-424 is to reduce present and future emissions of mercury from coal-fired electric generating units (see separate filings for Rules R307-210, R307-220, and R307-224 in this issue). (DAR NOTE: The proposed

amendment for Rule R307-210 is under DAR No. 29228, the proposed amendment for Rule R307-220 is under DAR No. 29229, and the proposed new Rule R307-224 is under DAR No. 29230 in this issue, December 1, 2006, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: Rule R307-424 requires that existing coal-fired electric generating units with an input heat capacity in excess of 1,500 MMBtu per hour shall demonstrate compliance with at least one of the following: 1) a maximum emission rate of 6.50×10^{-7} pounds mercury per million btu heat input; or 2) a minimum of 90% control of total mercury emissions. Any electric generating unit, new or expanding, in addition to being subject to the requirements of 40 CFR Part 60, Subpart HHHH, which is incorporated by reference in Rule R307-224, is required to obtain offsets at a ratio of 1:1.1 from other electric generating units within Utah when seeking a permit to increase emissions of mercury. The Air Quality Board specifically seeks comment as to whether emission credit may be sought for use in Utah from the Deseret Generation and Transmission plant in the Uintah Basin, as this proposal allows; the plant is on tribal lands and thus its emissions are regulated by the federal government, not the state (see separate filings on Rules R307-220 and R307-224 in this issue).

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsections 19-2-104(1)(a) and 19-2-104(3)(e)

ANTICIPATED COST OR SAVINGS TO:

- ❖ **THE STATE BUDGET:** There is no additional cost to state government, as the cost of enforcing the regulations is covered by the fees paid by the affected sources for their permits under Rule R307-415, Operating Permits.
- ❖ **LOCAL GOVERNMENTS:** There is no cost to local governments, as no sources owned by local governments are affected by this rule.
- ❖ **OTHER PERSONS:** Four of the affected electric generating units in Utah can meet the emission limits of this rule; there are 3 other units that will need to retrofit and the cost will be approximately \$50 million per unit, for a total of \$150,000,000. Retrofitting will allow the operators of these sources to sell mercury emissions allowances on the national market to other electric generating units where the cost of retrofitting is higher, thus offsetting part of the cost. The value of the offsets is unknown until the national program begins operation (see separate filings in this issue on Rules R307-220 and R307-224).

COMPLIANCE COSTS FOR AFFECTED PERSONS: Four of the affected electric generating units in Utah can meet the emission limits of this rule; there are 3 other units that will need to retrofit and the cost will be approximately \$50,000,000 per unit. Retrofitting will allow the operators of these sources to sell mercury emissions allowances on the national market to other electric generating units where the cost of retrofitting is higher, thus offsetting part of the cost. The value of the offsets is unknown until the national program begins operation (see separate filings in this issue on Rules R307-220 and R307-224).

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: Implementing this mercury reduction program will bring significant costs for some utilities. The health benefits of the rule are likely to be significant, because it will put mercury emissions from electric generating units on a downward trend, while allowing production of electric power to expand. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Jan Miller at the above address, by phone at 801-536-4042, by FAX at 801-536-0085, or by Internet E-mail at janmiller@utah.gov

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INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 12/12/2006 at 1:30 PM, DEQ Building, 168 N 1950 W, Room 201, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 02/07/2007

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-424. Permits: Mercury Requirements for Electric Generating Units.

R307-424-1. Purpose and Applicability.

The purpose of R307-424 is to regulate mercury emissions from any coal-fired electric generating unit (EGU). R307-424 applies to any coal-fired electric generating unit as defined in 40 CFR 60.24.

R307-424-2. Part 70 Permit.

Sources meeting the applicability requirements of R307-424-1 above, and also meeting the applicability requirements of R307-415-4, are required to obtain a mercury (Hg) budget permit in accordance with R307-224-2(1)(a).

R307-424-3. Offset Requirement: Mercury.

Sources meeting the applicability requirements of R307-424-1 above and making application for an approval order under R307-401 shall, in addition to any other requirement for obtaining such approval order, obtain an enforceable offset for any potential increase in mercury emissions in accordance with the following:

(1) The permitted increase in mercury emissions, considering the application of any control method or device, shall be offset by mercury emission credits at a ratio of 1 to 1.1 respectively.

(2) The averaging period for such determinations shall be a 12-month period.

(3) Mercury emission credits must be obtained from an EGU located within the State of Utah, including any EGU located on Indian lands within the State.

(4) To preserve reductions in mercury emissions as credits for use in offsetting potential increases, the executive secretary must identify such credits in an order issued pursuant to R307-401 and shall provide a registry to identify the person, private entity or governmental authority that has the right to use or allocate the banked emission reduction credits, and to record any transfers of, or liens on, these rights.

(5) Any emission offsets shall be enforceable by the time a new or modified source commences construction, and, by the time a new or modified source commences operation, any emission offsets shall be in effect and enforceable.

(6) The quantity of mercury emission reductions to be used for credit will be determined in accordance with 40 CFR part 75, or will be based on the best available data reported to the executive secretary. To the extent that the EGU has been subject to the requirements of part 75, mercury emissions data shall be the average of the 3 highest annual amounts over the most recent 5-year period.

(7) R307-424-3 shall not apply to any EGU for which a valid approval order was issued prior to November 17, 2006.

R307-424-4. Emission Rates.

(1) By no later than December 31, 2012, the owner or operator of any EGU with an input heat capacity in excess of 1,500 MMbtu per hour and having commenced operations prior to November 17, 2006, shall demonstrate compliance with at least one of the following:

(a) A maximum emission rate of 6.50×10^{-7} pounds mercury per million btu heat input; or

(b) A minimum of 90% control of total mercury emissions.

(2) Compliance with (1) above shall be based on an annual averaging period beginning January 1 and ending December 31.

(a) Beginning January 1, 2013, compliance shall be determined using the monitoring and recordkeeping requirements incorporated under R307-224-2. Upon completion of each year's fourth quarterly report, an assessment shall be made for the entire calendar year and reported to the executive secretary within 30 days.

(b) Where it is necessary to determine the mercury content of the coal or coals burned, the owner or operator shall use the appropriate ASTM method, and shall measure at least one representative sample each month. Records of such testing shall be kept for a period of at least five years, and shall be made available to the executive secretary upon request.

(3) Should an EGU be found in noncompliance with (1) above, despite properly operating the unit in conjunction with a baghouse as well as wet or dry flue gas de-sulfurization, the owner or operator may petition the executive secretary for a modification to the limits therein in accordance with R307-401.

KEY: air pollution, electric generating unit, mercury

Date of Enactment or Last Substantive Amendment: 2007

Authorizing, Implemented, or Interpreted Law: 19-2-101; 19-2-104(1)(a); 19-2-104(3)(e); 40 CFR 60.24

Change in Proposed Rule R307-424

R307. Environmental Quality, Air Quality.

R307-424. Permits: Mercury Requirements for Electric Generating Units.

R307-424-1. Purpose and Applicability.

The purpose of R307-424 is to regulate mercury emissions from any coal-fired electric generating unit (EGU). R307-424 applies to any coal-fired electric generating unit as defined in 40 CFR 60.24.

R307-424-2. Part 70 Permit.

Sources meeting the applicability requirements of R307-424-1 above, and also meeting the applicability requirements of R307-415-4, are required to obtain a mercury (Hg) budget permit in accordance with R307-224-2(1)(a).

R307-424-3. Offset Requirement: Mercury.

Sources meeting the applicability requirements of R307-424-1 above and making application for an approval order under R307-401 shall, in addition to any other requirement for obtaining such approval order, obtain an enforceable offset for any potential increase in mercury emissions in accordance with the following:

- (1) The permitted increase in mercury emissions, considering the application of any control method or device, shall be offset by mercury emission credits at a ratio of 1 to 1.1 respectively.
- (2) The averaging period for such determinations shall be a 12-month period.
- (3) Mercury emission credits must be obtained from an EGU located within the State of Utah, ~~excluding~~~~[including]~~ any EGU located on Indian lands within the State.
- (4) To preserve reductions in mercury emissions as credits for use in offsetting potential increases, the executive secretary must identify such credits in an order issued pursuant to R307-401 and shall provide a registry to identify the person, private entity or governmental authority that has the right to use or allocate the banked emission reduction credits, and to record any transfers of, or liens on, these rights.
- (5) Any emission offsets shall be enforceable by the time a new or modified source commences construction, and, by the time a new or modified source commences operation, any emission offsets shall be in effect and enforceable.
- (6) The quantity of mercury emission reductions to be used for credit will be determined in accordance with 40 CFR part 75, or will be based on the best available data reported to the executive secretary. To the extent that the EGU has been subject to the requirements of part 75, mercury emissions data shall be the average of the 3

highest annual amounts over the most recent 5-year period. Mercury emission reductions made prior to December 31, 1999 shall not be creditable for such purpose.

(7) R307-424-3 shall not apply to any EGU for which a valid approval order was issued prior to November 17, 2006.

R307-424-4. Emission Rates.

(1) By no later than December 31, 2012, the owner or operator of any EGU with an input heat capacity in excess of 1,500 MMBtu per hour and having commenced operations prior to November 17, 2006, shall demonstrate compliance with at least one of the following:

(a) A maximum emission rate of 6.50×10^{-7} pounds mercury per million btu heat input; or

(b) A minimum of 90% control of total mercury emissions.

(2) Compliance with (1) above shall be based on an annual averaging period beginning January 1 and ending December 31.

(a) Beginning January 1, 2013, compliance shall be determined using the monitoring and recordkeeping requirements incorporated under R307-224-2. Upon completion of each year's fourth quarterly report, an assessment shall be made for the entire calendar year and reported to the executive secretary within 30 days.

(b) Where it is necessary to determine the mercury content of the coal or coals burned, the owner or operator shall use the appropriate ASTM method, and shall measure at least one representative sample each month. Records of such testing shall be kept for a period of at least five years, and shall be made available to the executive secretary upon request.

(3) Should an EGU be unable to achieve the maximum emission rate or the minimum control efficiency described in~~[found in noncompliance with]~~ (1) above, despite proper~~[ly]~~ operation of~~[ng]~~ the unit in conjunction with a baghouse as well as wet or dry flue gas de-sulfurization, the owner or operator may petition the executive secretary for a modification to the compliance limitation for the unit~~[limits therein]~~ in accordance with R307-401.

(a) Such petition shall be received no later than the date upon which the compliance assessment required under (2)(a) above is due.

(b) Any such determination by the executive secretary will be made on a case-by-case basis, taking into consideration energy, environmental and economic impacts and other costs. It will be based on the best information and analytical techniques available.

KEY: air pollution, electric generating unit, mercury

Date of Enactment or Last Substantive Amendment: 2007

Authorizing, Implemented, or Interpreted Law: 19-2-101, 19-2-104(1)(a), 19-2-104(3)(e), 40 CFR 60.24